

**Notice of Allowability**

Application No.

10/082,687

Examiner

Greta L. Robinson

Applicant(s)

ANDREEV ET AL.

Art Unit

2167

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an Appeal Brief filed July 13, 2005.
2. ☒ The allowed claim(s) is/are 1, 2, 4-22 and 24-32 (now renumbered as claims 1-30).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 09262005.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Peng Zhu (registration no. 48,063) on September 26, 2005.

2. The application has been amended as follows:

In the specification page 5, paragraph 0014, line 6 **delete** ~~09/678,313~~ and **insert** 09/679,313

In the specification page 5, paragraph 0014, line 8 **delete** ~~09/678,313~~ and **insert** 09/679,209

In the claims please make the following amendments:

**Cancel claim 3**

**Cancel claim 23**

Please amend claim 1 as follows:

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1. (currently amended) A computer system for providing a search, comprising:
  - a central controller suitable for implementing search and edit operations; and
  - at least one search engine communicatively coupled to the central controller,wherein the central controller performs parallel execution of a search operation and an edit operation through utilization of a binary search tree and the at least one search engine; wherein the at least one search engine includes a priority controller, memory, edit module, search module and address cache.

Please amend claim 21 as follows:

- 21.(currently amended) A computer system for providing a search, comprising:
  - a central controller suitable for implementing search and edit operations, the central controller suitable from inputting and outputting external communications; and
  - a plurality of search engines arranged in zero through  $k$  levels, wherein  $k$  level search engine of the plurality of search engines is communicatively coupled to the central controller and a zero level search engine of the plurality of search engines is communicatively coupled to the central controller, wherein the central controller performs parallel execution of a search operation and an edit operation through utilization of a binary search tree and at least one of the plurality of search engines; wherein at least one of the search engines include a priority controller, memory, edit module, search module and address cache.

3. The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach the architecture of independent claims 1, 14 and 21. Specifically regarding independent claim 1, the prior art of record fails to teach a search engine communicatively coupled to a central controller, wherein the central controller performs parallel execution of a search operation and an edit operation through utilization of a binary search tree and at least one search engine; wherein the at least one search engine includes a priority controller, memory, edit module, search module and address cache. Regarding independent claim 14, the prior art fails to teach the structure of a search engine for providing a search comprising the combined elements of memory, a priority controller, an edit module, a search module and an address cache as cited. Regarding independent claim 21, the prior art of record does not teach a plurality of search engines arranged in zero through  $k$  levels, wherein  $k$  level search engine of the plurality of search engines is communicatively coupled to the central controller and a zero level search engine of the plurality of search engines is communicatively coupled to the central controller, wherein the central controller performs parallel execution of a search operation and an edit operation through utilization of a binary search tree and at least one of the plurality of search engines; wherein at least one of the search engines include a priority controller, memory, edit module, search module and address cache.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greta L. Robinson whose telephone number is (571)272-4118. The examiner can normally be reached on M-F 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on (571)272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



GRETA ROBINSON  
PRIMARY EXAMINER

Greta Robinson  
Primary Examiner  
September 26, 2005